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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,107	10/16/2003	Lewis B. Aronson	15436.51.1	7228

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WORKMAN NYDEGGER
(F/K/A WORKMAN NYDEGGER & SEELEY)
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER	
TRAN, DZUNG D	
ART UNIT	**PAPER NUMBER**
2613	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,107	ARONSON ET AL.	
	Examiner	Art Unit	
	Dzung D. Tran	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1027* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *13-24* is/are allowed.

6)☒ Claim(s) *1-12 and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-12 and 25-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In the remarks, applicant argues that the newly added feature "a pliable member that includes the first and second transmission lines" of claim 1 is supported by Figure 2, and paragraphs 0026-0029. However, the newly added limitation "a pliable member that includes the first and second transmission lines" is not described in the specification and the drawing.

In the remarks, applicant argues that the newly added feature "a pliable member including first and second insulating layers between which a portion of the first transmission line is positioned" of claim 7 is supported by Figure 2, and paragraphs 0026-0029. However, the newly added limitation "a pliable member including first and second insulating layers between which a portion of the first transmission line is positioned" is not described in the specification and the drawing.

In the remarks, applicant argues that the newly added feature "first and second pliable insulating layers between which a portion of the first and second transmission lines are disposed" of claim 25 is supported by Figure 2, and paragraphs 0026-0029. However, the newly added limitation "a pliable member including first and second insulating layers between which a portion of the first transmission line is positioned" is not described in the specification and the drawing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-12 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Auracher et al. U.S. Patent no. 6,781,727.

Regarding claim 1, as far as examiner understood, Auracher discloses in Figure 1b, an optical transmission or reception module comprises a matching circuit 7 (e.g., equivalent to flexible circuit) adapted to connect a driver circuit and an optical assembly, said matching circuit 7 (e.g., equivalent to flexible circuit) comprising:

a first transmission line (e.g., the line that containing components C2, R1, R2, or C*2, R*1, R*2) adapted to deliver a first signal from the driver circuit D to the optical assembly LD, said first transmission line comprising a first end adapted to connect to the driver circuit D and a second end adapted to connect to the optical assembly LD; and

a second transmission line (e.g., the line that containing components L or L*) used to bias said first signal, said second transmission line being electrically connected to said second end of said first transmission line.

Auracher does not specifically disclose a pliable member that includes the first and second transmission lines. However, to include a pliable member in the apparatus is not patentably significant since it relates to the circuit design which is not ordinarily a matter of invention. Therefore, it would have been obvious to an artisan at the time of the invention was made to include the pliable member in the apparatus of Auracher. One of ordinary skill in the art would have been motivated to do that in order to connect the circuit board to the optical assembly easier.

Regarding claim 2, Auracher discloses in Figure 1b, wherein said at least one first transmission line further comprises a matching impedance R1, R2, R*1, R*2.

Regarding claim 3, Auracher discloses in Figure 1b, wherein said at least one second transmission line (e.g., the line that containing components L or L*) is electrically connected to said at least one first transmission line between said matching impedance R1 and said optical assembly LD.

Regarding claim 4, Auracher discloses in Figure 1b, wherein said optical assembly comprises a laser diode LD.

Regarding claim 5, Auracher discloses in Figure 1b, wherein an end of said at least one second transmission line is electrically connected to a direct current source (e.g., source of bias current).

Regarding claim 6, Examiner take an official notice that the first signal (or modulated driving signal) is well recognized in the art as an alternating current signal.

Regarding claim 7, Auracher discloses in Figure 1b, an optical transmission or reception module comprising:

a first transmission line (e.g., the line that containing components C2, R1, R2, or C*2, R*1, R*2) comprising a first end and a second end, said first transmission line electrically connected at said first end to a means (e.g., laser driver D) for generating modulated signals and electrically connected at said second end to a means(e.g., LD) for generating optical signals based upon said modulated signals; and

electrically connected to said second end of said first transmission line, means (e.g., the line that containing components L or L*) for biasing said modulated signals. Auracher does not specifically disclose a pliable member including first and second insulating layers between which a portion of the first transmission line is positioned. However, to include a pliable member in the apparatus is not patentably significant since it relates to the circuit design which is not ordinarily a matter of invention. Therefore, it would have been obvious to an artisan at the time of the invention was made to include the pliable member in the apparatus of Auracher. One of ordinary skill

in the art would have been motivated to do that in order to connect the circuit board to the optical assembly easier.

Regarding claim 8, Auracher discloses in Figure 1b, means for generating one or more modulated signals comprises a laser driver D.

Regarding claim 9, Auracher discloses in Figure 1b, wherein said means for generating optical signals comprises a laser diode LD.

Regarding claim 10, Auracher discloses in Figure 1b, a matching circuit 7 (e.g., equivalent to flexible circuit) incorporating said first transmission line and said second transmission line and electrically connecting said means (e.g., laser driver D) for generating modulated signals to said means (e.g., LD) for generating optical signals based upon said modulated signals.

Regarding claim 11, Auracher discloses in Figure 1b, a current source (e.g., the source that provide bias current I_{bias}), said current source configured to deliver a bias current to said means for generating optical signals.

Regarding claim 12, Auracher discloses in Figure 1b, wherein an end of said second transmission line is electrically connected to a direct current source (col. 6, lines 9-12).

Regarding claim 25, Auracher discloses in Figure 1b, an optical transmission or reception module comprising:

a driver circuit D adapted to generate a modulated driver signal deliverable to an optical assembly LD;

a current source (e.g., the source that provide bias current I_{bias}) in communication with said optical assembly and adapted to provided a bias current for said optical assembly; and

a matching circuit 7' (e.g., equivalent to flexible circuit) electrically connecting at least two of said driver circuit D, D*, said direct current source (e.g., the source that provide bias current I_{bias}), and said optical assembly LD, said matching circuit 7' (e.g., equivalent to flexible circuit) comprises:

a first transmission line (e.g., the line that containing components C2, R1, R2, or C*2, R*1, R*2), electrically connected to said driver circuit D at a first end and to said optical assembly LD at a second end, said first transmission line being adapted to allow said modulated signal to be delivered to said optical assembly; and

a second transmission line (e.g., the line that containing components L or L*) electrically connected to said current source and to said optical assembly, said second transmission line being connected to said second end of said first transmission line. Auracher does not specifically disclose first and second pliable insulating layers between which a portion of the first and second transmission lines are disposed. However, to include a pliable member in the apparatus is not patentably significant since it relates to the circuit design which is not ordinarily a matter of invention. Therefore, it would have been obvious to an artisan at the time of the invention was made to include the pliable member in the apparatus of Auracher. One of ordinary skill in the art would have been motivated to do that in order to connect the circuit board to the optical assembly easier.

Regarding claim 26, Auracher discloses in Figure 1b, wherein said first transmission line further comprises a matching impedance R1, R2, R*1, R*2.

Regarding claim 27, Auracher discloses in Figure 1b, wherein said second transmission line (e.g., the line that containing components L or L*) is connected to said first transmission line between said matching impedance R1 and said optical assembly LD.

5. Claims 13-24 are allowed.

Response to Arguments

6. Applicant's arguments with respect to new claims 1-12 and 25-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (571) 272-3025.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (571) 272-3022.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Dzung Tran

DZUNG TRAN
PRIMARY PATENT EXAMINER

Dzung Tran

03/24/2007